CLAIMS

What is claimed is:

1. A structural assembly comprising:

an elongate member having an external cross-sectional shape which is substantially square having corners replaced by circumferentially spaced circular portions of a circumscribing circle with flat portions therebetween which lie within the circle; and

a receiving member having a receiving formation having an internal cross-sectional shape which cooperates at least with the flat portions of the external cross-sectional shape of the elongate member, to prevent relative movement between the receiving member and elongate member about a longitudinal axis of the elongate member.

2. An assembly according to Claim 1 wherein the external cross-sectional shape of the elongate member and internal cross-sectional shape of the receiving formation are substantially the same as one another.

3. An assembly according to Claim 1 further comprising a fastener for fastening the members together.

4. An assembly according to Claim 3 wherein the fastener extends transversely through the receiving formation and the elongate member.

5. An assembly according to Claim 3 wherein the fastener comprises a clamp embracing a part of the receiving member to clamp the elongate member in the receiving formation.

6. An assembly according to Claim 5 further comprising a locating element engaging the receiving member and elongate member to position the receiving member and elongate member relative to one another.

7. An assembly according to Claim 6 wherein the locating element is associated with the clamp and extends inwardly from the clamp through the receiving member to engage the elongate member.

8. An assembly according to Claim 7 wherein the elongate member has a plurality of the formations for adjusting the position of the elongate member relative to the receiving member.

9. An assembly according to Claim 1 further comprising a member angularly movable about the longitudinal axis of the elongate member and being received on the elongate member and engaging the circular portions of the elongate member.

10. A wheelchair comprising:

two side frame structures which carry wheels, each side frame structure including an upper rail member and a lower rail member extending forward and rearward of the wheelchair; and

at least one structural assembly provided between one or more of the rail members for joining the rail members at front and/or rear of the wheelchair, the assembly comprising:

an elongate member having an external cross-sectional shape which is substantially square having corners replaced by circumferentially spaced circular portions of a circumscribing circle with flat portions therebetween which lie within the circle; and

a receiving member having a receiving formation having an internal cross-sectional shape which cooperates at least with the flat portions of the external cross-sectional shape of the elongate member, to prevent relative movement between the receiving member and elongate member about a longitudinal axis of the elongate member.

11. A wheelchair according to Claim 10 further comprising a cross-brace assembly including first and second cross-brace members pivotally connected to one another between ends thereof by a pivot, each of the cross-brace members being pivotally connected at a lower end with a respective one of the side frame lower rail members and being connected at an opposite upper end with a respective seat-supporting member, and respective links pivotally connected between the cross-brace members and a respective one of the upper rail members of the side frame structures, and wherein at least one of the assemblies is provided in each cross-brace member.

12. A structural assembly comprising an elongate member engaging in a receiving formation of a receiving member, and a clamp embracing the receiving member to clamp the elongate member in the receiving formation, wherein the clamp includes a locating element cooperating with respective formations in the elongate member and receiving member to position the elongate member in the direction of its length relative to the receiving member.

13. A structural assembly according to Claim 12 wherein the formations comprise an aperture in the receiving member and an aperture or recess in the elongate member, the locating element extending radially inwardly through the aperture in the receiving member to engage the recess or aperture in the elongate member.

14. A structural assembly according to Claim 13 wherein there is a row of the formations in the elongate member, spaced lengthwise thereof to permit adjustability in the position of the elongate member relative to the receiving member.

15. A structural assembly according to Claim 14 wherein the locating element comprises a nose portion of a fastener by which the clamp is tightened.

16. In combination:

a first cross-brace member pivotally connected to a second cross-brace member, the cross-brace members each comprising an elongate member;

at least one of a seat-supporting member or a pivot member comprising a receiving member, the elongate member engaging in a receiving formation of the receiving member; and

a clamp embracing the receiving member to clamp the elongate member in the receiving formation, wherein the clamp includes a locating element cooperating with respective formations in the elongate member and receiving member to position the elongate member in the direction of its length relative to the receiving member.

17. A wheelchair comprising:

two side frame structures which carry wheels, each side frame structure including an upper rail member and a lower rail member extending forward and rearward of the wheelchair;

a cross-brace assembly including first and second cross-brace members each comprising an elongate member and a pivot member pivotally engaged with a respective one of the side frame lower rail members;

a seat supported by a seat-supporting member of each one of the cross-brace members, at least one of the seat-supporting member or the pivot member comprising a receiving member, the elongate member engaging in a receiving formation of the receiving member;

respective links pivotally connected between the cross-brace members and respective upper rail members of the side frame structures; and

a clamp embracing the receiving member to clamp the elongate member in the receiving formation, wherein the clamp includes a locating element cooperating with respective formations in the elongate member and receiving member to position the elongate member in the direction of its length relative to the receiving member.